We Claim:

1. A display device having a first substrate with a semiconductor film formed on the top surface thereof, a second substrate overlaid on the top surface with a predetermined gap interposed therebetween, and a display region including a multitude of data lines juxtaposed so as to be extended in a direction on the top surface of the first substrate, a multitude of scanning lines juxtaposed so as to be extended in another direction crossing the direction, and a multitude of pixels arranged in a matrix form, made up of pixel circuits having pixel active elements formed of the semiconductor film and disposed in the vicinity of cross-over points of the data lines and the scanning lines,

said display device comprising a driver circuit disposed outside of display region, on at least one side of the first substrate, including driver active elements for driving the pixel circuits via the data lines and scanning lines,

wherein

the semiconductor film of which the driver active elements are made up is a polycrystalline semiconductor film containing band-like crystal grains having no grain boundaries crossing the direction of current flow.

2. A display device according to claim 1, wherein the driver circuit is divided and formed at a plurality of spots on at least one side of the first substrate.

3. A display device according to claim 1, wherein the first substrate and the second substrate are glass substrates,

the pixel active elements and the driver active elements are thin-film transistors,

the pixel comprise a pixel electrode driven by output of the pixel thin-film transistor of the pixel circuit making up the relevant pixel, and

a liquid crystal layer is sandwiched in a gap between the first substrate and the second substrate.

4. A display device according to claim 3, further comprising a common electrode on the second substrate, for forming an electric field between the second substrate and the pixel electrodes.

5. A display device according to claim 3, further comprising a common electrode on the first substrate, for forming an electric field between the first substrate and the pixel electrodes.

6. A display device according to claim 1, wherein the first substrate is at least a glass substrate, the pixel active elements and the driver active elements are thin-film transistors, the pixel comprises an electrode either an anode or a cathode, driven by output of the pixel active

elements of the pixel circuit making up the relevant pixel, and an organic luminescent layer is interposed between the pixel and the electrode with polarity opposite to the other electrode.

7. A process of fabricating a display device for obtaining an active matrix substrate for use in a display device by placing an insulating substrate with an amorphous semiconductor film or a granular polycrystalline semiconductor film formed on the top surface thereof on a stage, irradiating laser light to a plurality of regions on the amorphous semiconductor film or the granular polycrystalline semiconductor film on the insulating substrate so as to be annealed, reforming the amorphous semiconductor film or the granular polycrystalline semiconductor film into polycrystalline semiconductor film containing band-like crystal grains,

said process comprising the steps of:

using continuous-wave laser light condensed into linear or rectangular form as the laser light;

continuously moving the insulating substrate in a direction crossing the linear form or the longitudinal direction of the rectangular form; and

repeating operation of starting irradiation of the continuous-wave laser light at a time when respective regions to be irradiated with the laser light are reached and stopping irradiation of the continuous-wave laser light

at a time when the respective regions to be irradiated with the laser light are passed, thereby discontinuously forming the band-like polycrystalline semiconductor film as reformed in relation to a moving direction of the insulating substrate.

8. A process of fabricating a display device according to claim 7, further comprising the step of

starting irradiation of the continuous-wave laser light upon start of movement of the insulating substrate at irradiation energy density equivalent to not more than one third of a value suitable for reformation of the amorphous semiconductor film or the granular polycrystalline semiconductor film,

setting the irradiation energy density of the continuous-wave laser light at the value suitable for reformation of the amorphous semiconductor film or the granular polycrystalline semiconductor film at a time when respective regions where the reformation is to be made in a state of continuously moving the insulating substrate, and

reducing the irradiation energy density of the continuous-wave laser light to not more than one third of a value suitable for reformation of the amorphous semiconductor film or the granular polycrystalline semiconductor film at a time when respective regions where the reformation is to be made is passed.

9. A process of fabricating a display device according to claim 7, where the respective regions where the reformation is to be made are active regions of thin-film transistors, and the periphery thereof.

10. A process of fabricating a display device according to claim 9, where the insulating substrate is a glass substrate and the respective regions where the reformation is to be made are regions where active regions of driver thin-film transistors are formed.

11. A process of fabricating a display device according to claim 7, where the continuous-wave laser light is the second harmonics of LD (laser diode) pumped YVO_4 continuous wave laser.

12. An apparatus for fabricating a display device comprising:

stage means capable of mounting an insulating substrate of the display device and moving the insulating substrate;

position detection means for detecting a position or moving distance of said substrate;

laser light source means for generating continuous-wave laser light;

modulation means for turning ON / OFF the continuous-wave laser light generated by the laser light source means;

forming optical means for forming the continuous-wave laser light passing through the modulation means into a linear or rectangular form;

condensing optical means for projecting laser light formed into the linear or rectangular form on the insulating substrate for irradiation, and

controller for counting a signal generated by the position detection means for every movement of the stage means for a given distance, causing the modulation means to turn the generating continuous-wave laser light in ON state at time when a position where laser light irradiation is to be started is reached and counting a signal generated by the position detection means, causing the modulation means to turn the generating continuous-wave laser light in OFF state at time when a position where laser light irradiation is to be stopped is reached,

wherein

a plurality of regions on said substrate are irradiated with the continuous-wave laser light in a state when said substrate is kept in continuous movement.

13. An apparatus for fabricating a display device comprising:

stage means capable of mounting an insulating substrate of the display device and moving the insulating substrate;

position detection means for detecting a position or moving distance of said substrate;

laser light source means for generating continuous-wave laser light;

modulation means for turning ON / OFF the continuous-wave laser light generated by the laser light source means;

forming optical means for forming the continuous-wave laser light passing through the modulation means into a linear or rectangular form;

condensing optical means for projecting laser light formed into the linear or rectangular form on the insulating substrate for irradiation, and

controller for counting a signal generated by the position detection means for every movement of the stage means for a given distance, causing the modulation means to turn the generating continuous-wave laser light in ON state at time when a position where laser light irradiation is to be started is reached and causing the modulation means to turn the generating continuous-wave laser light in OFF state at time when a preset time has elapsed from the start of the laser light irradiation,

wherein

a plurality of regions on said substrate are irradiated with the continuous-wave laser light in a state when said substrate is kept in continuous movement.

14. An apparatus for fabricating a display device according to claim 12, wherein the modulation means is an electro-optical modulator.

15. An apparatus for fabricating a display device according to claim 12, wherein the insulating substrate is a substrate with an amorphous semiconductor film or a granular polycrystalline semiconductor film formed thereon.

16. An apparatus for fabricating a display device according to claim 12, wherein the continuous-wave laser light is the second harmonics of laser diode pumped YVO_4 continuous wave laser.

17. An apparatus for fabricating a display device according to claim 12, further comprising a plurality of the laser light source means, modulation means, forming optical means, and condensing optical means, respectively, wherein a plurality of spots on the insulating substrate mounted on the stage means are simultaneously irradiated with the laser light.

18. A display device having a first substrate with a semiconductor film formed on the top surface thereof, a second substrate overlaid on the top surface with a predetermined gap interposed therebetween, and a display region including a multitude of data lines juxtaposed so as to be extended in a direction on the top surface of the first substrate, a multitude of scanning lines juxtaposed so as to be extended in another direction crossing the direction, and a multitude of pixels arranged in a matrix form, made up of pixel circuits having pixel active elements formed of the semiconductor film and disposed in the vicinity of cross-over points of the data lines and the scanning lines,

said display device comprising a driver circuit disposed outside of display region, on at least one side of the first substrate, including driver active elements for driving the pixel circuits via the data lines and scanning lines,

wherein

the driver circuit is divided into a plurality of blocks disposed at an equal interval, and a plurality of the driver active elements for driving the pixel circuits via the data lines and scanning lines are arranged at an equal interval within the respective blocks.

19. A process of fabricating a display device for obtaining an active matrix substrate for use in a display device by placing an insulating substrate with an amorphous

semiconductor film or a granular polycrystalline semiconductor film formed on the top surface thereof on a stage, irradiating laser light to a plurality of regions on the amorphous semiconductor film or the granular polycrystalline semiconductor film on the insulating substrate so as to be annealed, reforming the amorphous semiconductor film or the granular polycrystalline semiconductor film into polycrystalline semiconductor film containing band-like crystal grains, said process comprising the steps of:

using continuous-wave laser light condensed into linear or rectangular form as the laser light;

continuously moving the insulating substrate in a direction crossing the linear form or the longitudinal direction of the rectangular form; and

repeating operation of starting irradiation of the continuous-wave laser light at a time when respective regions to be irradiated with the laser light are reached and stopping irradiation of the continuous-wave laser light at a time when the respective regions to be irradiated with the laser light are passed, thereby forming the band-like polycrystalline semiconductor film as reformed at given pitches to an equal size in relation to a moving direction of the insulating substrate.